PATENT APPLICATION DOCKET NO.: 200209135-1

ABSTRACT OF THE DISCLOSURE

A system and method for testing a circuit design using a test generator. In one embodiment, a random number generator, responsive to a seed, generates a random number sequence and an event probability generator, responsive to profile settings, generates a probability profile. The test generator, responsive to the random number sequence and the probability profile, generates a test case that includes settings indicative of the seed and the profile settings. An extraction and regeneration engine extracts the seed and the profile settings from the test case in order to reconstitute a test case designed to avoid illegal test behavior.